## STATEMENT OF CONSIDERATIONS

REQUEST BY AIR PRODUCTS AND CHEMICALS, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER A SUBCONTRACT WITH MILLENNIUM CELL, INC. UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC36-04GO14008; W(A)-04-045; CH-1213

The Petitioner, Air Products and Chemicals, Inc. (Air Products) has requested an advance waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above-identified cooperative agreement entitled "Process for Regeneration of Sodium Borate to Sodium Borohydride for use as a Hydrogen Storage Source". The Petitioner is a subcontractor under the referenced DOE cooperative agreement with Millenium Cell, Inc., a domestic small business.

Referring to item 2 of Air Products' waiver petition, the purpose of the agreement is to develop and construct a prototype process demonstration unit to validate a hydrogen storage mechanism utilizing sodium borohydride. As a participating partner under its subcontract, Air Products is contributing research personnel, laboratory equipment and process expertise.

The work under the agreement is expected to take place over a period of about three years at a total cost of \$4,602,635. As prime contractor under the agreement Millennium Cell, Inc. is obligated to cost share \$1,002,221, or about 20 percent of the total cost of the project. With respect to Air Products, the total cost of the work to be done under its subcontract is \$2,063, 763, of which Air Products has agreed to cost share \$412,753, or 20 percent of the total cost of the subcontract.

The Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United states unless Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. Additionally, the Petitioner has also agreed to make the above condition binding on any assignee, licensee or other entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Petitioner or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

Referring to items 5-9 of Air Products' waiver petition, Air Products is an industry leader in the development of hydrogen fuel packaging with broad experience in packaged gases and hydrogen technology. This, coupled with Air Products' cost sharing, clearly demonstrates the likelihood that Air Products will continue development and commercialization of the results of this agreement.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition as there are a variety of competing technologies in the relevant hydrogen storage market.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement in a fashion which will make the technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives recommended that the requested waiver be granted.

Thomas G. Anderson
Assistant Chief Counsel
Intellectual Property Law Division

Date: 8-6-04

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification or extension of the contract, where through such modification or extension, the purpose, scope or cost of the contract has been substantially altered.

Steven G. Chalk, Director
Office of Hydrogen, Fuel Cells and Infrastructure Technologies Program
EE-2H

Date: 9-23-04

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel for Technology
Transfer and Intellectual Property, GC-62

Date: 19-6-04

## (t) U. S. COMPETITIVENESS

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.